

# METHOD FOR MANUFACTURING NITRIDE SEMICONDUCTOR, METHOD FOR MANUFACTURING NITRIDE SEMICONDUCTOR ELEMENT AND NITRIDE SEMICONDUCTOR ELEMENT USING THE SAME

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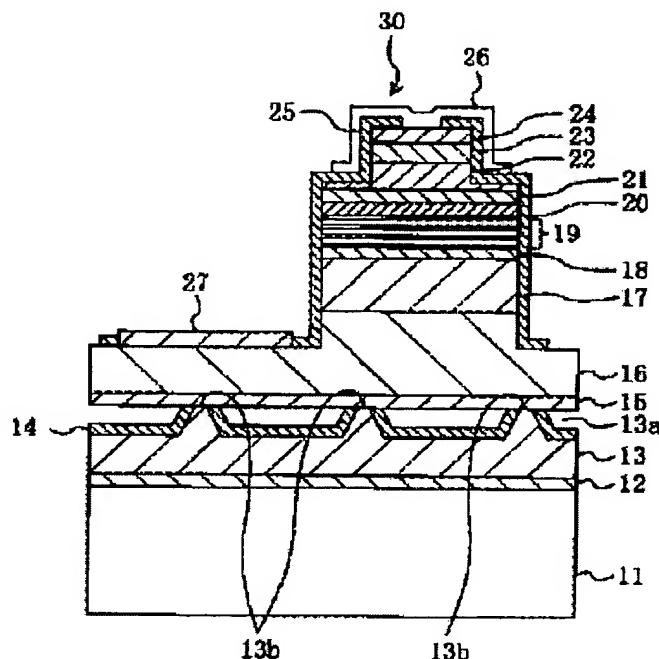
 EP1220304 (A2)  
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## Abstract of JP2002198314

**PROBLEM TO BE SOLVED:** To obtain a sharp p type impurity profile with low resistance by increasing p type impurity concentration of a nitride semiconductor without increasing the doping quantity. **SOLUTION:** An MQW active layer 19 and a p type super lattice cap layer 20 formed on the MQW active layer 19 are formed on a substrate 11. The p type super lattice cap layer 20 is comprised of four-cycle-laminate of a first layer 20a which is a GaN and a second layer 20b which is an AlGaN formed on the first layer 20a. The concentration of the p type dopant increases locally at an adjacent region to a boundary face between the first layer 20a and the second layer 20b.



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